BRUHAT BANGALORE MAHANAGARA PALIKE

Project: Park development and Walking Track in Thirumenahalli Lake at Ward No 05

Byatarayanapura Sub Division

MODIFIED ESTIMATE

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			Amt 108.40 Lakhs
1	KSRB 2-2.1 : Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. specification. No. KBS 2.1(a) / 2.3.5 (P.No.6, I.No.2.3 of PW, P&IWTD SR 2018-19)								
	Park	Cum							
			1	44.00	0.60	0.35	9.24		
	Gym Equipment Area		1	10.00	10.00	0.30	30.00		
			30	1.50	2.10	0.30	28.35		
							67.59	344.07	**23255.69**
	Basic rate	**299**							
	Area Weightage 6%	**17.94**							
	Final Rate	**316.94**							
	8.56% Above	**344.07**							
2	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No. 13/I.No. 4.2 of CSR 2018-19)								
	Park	Cum							
			1	44.00	0.50	0.15	3.30		
	Gym Equipment Area		1	10.00	10.00	0.15	15.00		
			30	1.50	2.10	0.15	14.18		
							32.48	5976.92	**194100.48**
	Basic rate	**5194**							
	Area Weightage 6%	**311.64**							
	Final Rate	**5505.64**							
	8.56% Above	**5976.92**							
3	KSRB 5-11 : Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 (P.No. 27/I.No. 5.26.1 of CSR 2018-19)								
	Park	Sam							
			1	44.00		0.40	17.60		
	Gym Equipment Area		1	20.00		0.20	4.00		
			30	3.60		0.20	21.60		
			2	400.00		0.40	320.00		
							363.20	1107.01	**402066.03**

No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	Basic rate	**962.00**							
	Area Weightage 6%	**57.72**							
	Final Rate	**1019.72**							
	8.56% Above	**1107.01**							
4	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13,I No-4.6)								
	Park	Cum							
			1	44.00	0.50	0.10	2.20		
	Gym Equipment Area		1	10.00	10.00	0.10	10.00		
			30	1.50	2.10	0.10	9.45		
			4	400.00	0.20	0.10	32.00		
							53.65	6239.29	**334737.91**
	Basic rate	**5422.00**							
	Area Weightage 6%	**325.32**							
	Final Rate	**5747.32**							
	8.56% Above	**6239.29**							
5	KSRB15-3.9 :Providing 18mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. (P.No.116, I.No.15.17 of PW, P&IWTD SR 2018-19)								
			1	44.00		0.40	17.60		
							17.60	281.93	**4961.97**
	Basic rate	**245.00**							
	Area Weightage 6%	**14.70**							
	Final Rate	**259.70**							
	8.56% Above	**281.93**							
6	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (P.No.180, I.No.24.1 of PW, P&IWTD SR 2018-19)								
	Gym Equipment Area		1	44.00		0.40	17.60		
	0		1	70.00		0.40	28.00		
							45.60	92.06	**4197.94**
	Basic rate	**80.00**							
	Area Weightage 6%	**4.80**							
	Final Rate	**84.80**							
	8.56% Above	**92.06**							
7	KSRB 15-18.3 : Providing and applying enamel metal paint one coat (excluding priming coat) on previously painted steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications. (P.No.123, I.No.15.75 of PW, P&IWTD SR 2018-								
								70.19	**0.00**
	Basic rate	**61.00**							

No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Area Weightage 6%	**3.66**							
	Final Rate	**64.66**							
	8.56% Above	**70.19**							
						Item Not Executed			
8	KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of modified proctors density. MORTH Specification No. 305 (P.No.147, I.No.19.60 of PW,P&IWTD S.R 2018-19)								
	Park	Cum							
			1	1260.00	6.00	0.25	1890.00		
	Gym Equipment Area		1	10.00	12.00	0.25	30.00		
							1920.00	373.99	**718060.80**
	Basic rate	**325.00**							
	Area Weightage 6%	**19.50**							
	Final Rate	**344.50**							
	8.56% Above	**373.99**							
9	KSRRB 200-8. Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, by manual means, in area of light jungle, removal of stumps, disposal of unserviceable materials, stacking of serviceable materials labour charges complete as per specifications. MORTH / Chapter 2 (P.No.138, I.No.18.11 of PW, P&IWTD SR 2018-19)								
		Sqm							
			1	600.00	2.80	--	1680.00		
			1	600	2.20	--	1320.00		
	Park area		3	40.00	25.00	--	3000.00		
							6000.00	11.51	**69060.00**
	Basic rate	**10.00**							
	Area Weightage 6%	**0.60**							
	Final Rate	**10.60**							
	8.56% Above	**11.51**							
10	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)								
		Nos	1	70.00			**156.00**	469.50	**73242.00**
	Basic rate	**408.00**							
	Area Weightage 6%	**24.48**		0.45					
	Final Rate	**432.48**							
	8.56% Above	**469.50**							

No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
11	KSRRB M1200-46. Sand filling in wells complete as per drawing and technical specifications including cost of all materials, labour, HOM, form works, scaffolding & centering complete as per specifications. MORTH Specification No.1207 (P.No.217, I.No.27.17 of PW, P&IWTD SR 2018-19)								
		cum	1	20.00	15.00	0.30	**90.00**	3172.58	**285532.12**
	Basic rate	**2757.00**							
	Area Weightage 6%	**165.42**							
	Final Rate	**2922.42**							
	8.56% Above	**3172.58**							
12	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778 having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings, this includes jointing of pipes and fittings with one step solvent cement, trenching, refilling & testing of joints complete. (external work). - 50mm nominal OD pipes (P.No.99, I.No.13.87.6 of PW, P&IWTD S.R 2018-19)								
			1	900.00			900.00		
							900.00	497.12	**447406.16**
	Basic rate	**432.00**							
	Area Weightage 6%	**25.92**							
	Final Rate	**457.92**							
	8.56% Above	**497.12**							
13	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate) with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work								
	West side	Sqm	1	400.00	0.90		360.00		
							360.00	2537.05	**913336.99**
	Data Rate	**2337.00**							
	8.56% Above	**2537.05**							
14	KSRB13-6.3-7 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 65mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No.KBS 13.2.6 / 13.3. (P.No.92/ I.No. 13.38 of CSR 2018-19)								
	for every 30m	Each	42				42.00		
							42.00	2420.00	**101639.91**
	Basic rate	**2103.00**							
	Area Weightage 6%	**126.18**							
	Final Rate	**2229.18**							
	8.56% Above	**2420.00**							
15	Supplying Installing, testing and commissioning of hydraulically operated sprinkler cabit Valve with water meter gong bell and trims as required, pressure gauges drain Valve, ball Valves check valve, strainer etc.-do-100 mm dia. Complete complete as per specifications. Specification No.KBS 13.2.6 / 13.3. (P.No.368/ I.No. 40.96.1 of CSR 2018-								
	for every 30m	unit	1	42			**42**	821.63	**34508.27**

No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	Basic rate	**714.00**							
	Area Weightage 6%	**42.84**							
	Final Rate	**756.84**							
	8.56% Above	**821.63**							
16	Manufacturing,supply & fixing of Retro-Reflective Road name sign board Single Arrow size 1.6x0.9m size made out if wide angle cube corner micro prismatic grade sheeting confirming to IRC 67:2010 & type XI standards of ASTM D 4956-09 specifications and fixed over 2mm thick aluminium sheet back support frame of stainless steel supported by 30 NB 1.2 mm thick stainless steel pipe all around and 65 NB 1.5mm thick pipe vertical post (AISI 202 Grade) firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 30cmx30cmx45cm etc. complete. The information message shall be made out of cut out letters in blue colour transparent overlay film as per IRC 67-2010 Guidelines, 7 years pre-qualification warranty for retro reflective sheeting from the original sheeting manufacturer and a certified copy of three years outdoor exposure report from an independent test lab for the product offerd shall be submitted by the contractor. The sign board shall be Retro-Reflective Type XI. (P.No.368/ I.No. 40.96.1 of CSR 2018-19)								
			5				5.00		
							5.00	15301.34	**76506.68**
	Basic rate	**13297.00**							
	Area Weightage 6%	**797.82**							
	Final Rate	**14094.82**							
	8.56% Above	**15301.34**							
17	Providing and laying/fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick for flooring conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, including cutting, griding the edge to half/full round wherever required, labour, curing complete as per specification. (P.No. 112, I.No. 14.62 of PWD SR 2018-19)								
	Gym Equipment Area	Sqm	1	10.00	10.00		100.00		
			26	1.50	2.10		81.90		
			1	9.00	9.00		81.00		
							262.90	1417.71	**372715.11**
	Basic rate	**1232.00**							
	Area Weightage 6%	**73.92**							
	Final Rate	**1305.92**							
	8.56% Above	**1417.71**							

	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
18	Supply and Fixing of Pull Down Challenger. Metal: All tubular steel of 2 .5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All weld d joints are scalloped as necessary and welded to an approved MIG process.All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at Il the welding points prior to finishing . All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. Allmetal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to 1507227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for th e handles. Bearings:Maintenance-free ball bearings. Scope of delivery: 1completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified internat ional certifying agency such as IPEMA,TUV,CPSC, or SGS only.The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. All products must clearly display the GS ma rk as has been issued in the EN16630 safety certificates.								
		Each	1				1.00		
							1.00	260544.00	**260544.00**
	Data Rate	**240000**							
	8.56% Above	**260544**							
19	Supply and fixing of Seated Chest Press. Metal: All tubular steel of 2.Smm thikness are galvanized and z inc dipped. Joints are Robotic welded. All welded joints t1H • scalloped as necessary and welded to an approved MIG process. All welds an• 111 csed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the w 11lt1ing points prior to finishing. All metal parts are powder coated using AKZO Nobel (11 ca t Wall powder to the thickness of 80-120 microns. All metal parts are tested in rn 1r a lt spray machine that uses a 5% NaCl solution in accordance to 1507227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handle!,,Bearings: Maintenance-free ball bearings. Scope of delivery: 1completely Prt' ,ssembled equipment modules. Maintenance: Maintain according to EN 166630 and the maintenance guide. Safety: All products must be tested and certified to mt•(•lEN16630 safety standards with GS test mark. The EN 16630,certificates must be issued by a reputed notified international certifying agency such as IPEMA, 1UV, CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party.All products must clearly display the GS inark as has been issued in the								
		Each	1				1.00		
							1.00	249688.00	**249688.00**
	Data Rate	**230000**							
	8.56% Above	**249688**							

o.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
20	Supply and fixing of Self Weighted Rower. Metal: All tubular steel of 2.Smm thit.kness are galvaniied and zinc dipped. Joints are Robotic welded. All welded joiflts arc scalloped as necessary and welded to an approved MIG process. All welds arc dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our sa lt S'PI,ray machine.that uses a 5% NaCl solution in accordance to IS07227 to speed up3 c_6rrosion for 3000 hrs. Colour RAL 5019 Blue and RAL 1014 Beige Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1completely pre-assembled equipment modules. Maintain according to EN 16630 and the maintenance guide. Safety:All products must be tested and certified to meet EN16630 safety standards only by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS. The GS Mork• EN16630 Certificates must be in the name of tendering party and not any 3rd p;:11 ty All products must carry a GS mark on it.. Size_L x W x H}: 1390 x 805 x 1100 mm. Weight: 42.4 Kg Safety Area: 3790 x 3205 mm								
		Each	1				1.00		
							1.00	179124.00	**179124.00**
	Data Rate	**165000**							
	8.56% Above	**179124**							
21	Supply and fixing of Elliptical Cross Trainer. Metal: All t\jbular steel of 2.Smm thickness are galvanized and zinc dipped. Joints are RClbotic welded. All weldecl 1oints a re scalloped as necessary and welded to an approve(j MIG process. All welds .i re dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at .ill the welding points prior to finishing. Alt metal parts are PCl\vder coated using AKZO Nobel Great Wall powder to the thickness of 80-120 microns. All metal parts are testecJ in our salt spray machine that uses a 5% NaCl solution iri ilccordance to IS07227 to speed up corrosion for 3000 hrs. Rubber: High quality €rip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1completely.pre-assembled equipment modules. Maintenance: Maintain according to EN 1G630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards w ith GS test mark.The EN 16630 certificates must be issued by a reputed notified international certifying agl!ncy uch as IPEMA,TUV ,CPSC, or SGS only .The GS Mark-EN16630 Certificates must be in the name of tendering party and not any 3rd party. The certificates must be attached with 1 he tender document. Alt products must clearly display tt) GS mark as has been i ued in the EN16630 safety certificates.								
		Each	1				1.00		
							1.00	151984.00	**151984.00**
	Data Rate	**140000**							
	8.56% Above	**151984**							

No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
22	Supply and Fixing of Rider. Metal: All tubular steel of 2.smm thickness are galvd 1 ilzed and zinc dipped . Joints are Robotic welded. All weldect joints are scalloped as necessary and welded to an approved MIG proi;ess. .<\11 welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing.All metal parts are powder Clated using AKZO Nobel-G reat Wall powder to the thickness of 80-120 microns. All ll\etal parts are tested in our sa lt spray machine that uses a 5% NaCl solution in accorcJ<ince to 1507227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubher is used for the handles. 5 Bearings : Maintenance-free ball bearings...Scope of c:l livery: 1completely pre-assembled equipment modules. Maintenance: Maint<1in according to EN 16630 a nd the maintenance guide. Safety: Alf products must b tested and certified to meet EN16630 safety standards with GS test mark. The El\! 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV ,CPSC, or SGS only. The GS Mark-EN16630 Certificate must be in the name of tendering party and not any 3rd party. All products 'hust clearly display the GS mark as has been issued in the EN 16630 safety certificat .								
		Each	1				1.00		
							1.00	97704.00	**97704.00**
	Data Rate	**90000**							
	8.56% Above	**97704**							
23	Supply and Fixing of Bicycle. Metal: All tubular steel of 25mm thickness are galvani zed and zinc dipped. Joints are Robotic welded. All welded joint s are S('.llloped as necessary and w eldea to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the weltling points prior to finishing.All metal parts are powder coated using AKZO Nobel GreatWall powder to the thickness of 80- 120 microns. All metal parts are tested in our salt v pray machine that uses a 5% NaCl solution in accordance to IS07227 to speed up -orrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. each 1 125000 125000 131188 131188 134500 134500 Bearings: Maintenance-free ball bearings . Scope of delivery: 1completely pre assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to mee t EN16630 safety standards only by a reputed notified international certifying acency such as IPEMA,TUV,CPSC, or SGS. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. Size_L x W x H): 1000 x 498 x 120								
		Each	2				2.00		
							2.00	135700.00	**271400.00**
	Data Rate	**125000**							
	8.56% Above	**135700**							

	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
24	Supply and Fixing of Arm & Pedal Bike. Metal: All tubular steel of 2.Smm thickness a re galvanized and zinc dipped.Joints are Robotic welded.All welded joints are sca lloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to IS07227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles.Bearings : Maintenance-free ball bearings.Scope of delivery: 1completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide.Safety : All products must be tested anEI certified to meet EN16630 safety standards only by a reputed notified international certifying agencv such as IPEMA,TUV, CPSC, or SGS. The GS Mark- EN16630 Certificates must be in t he name of tendering party and not any 3rd								
		Each	1				1.00		
							1.00	184552.00	**184552.00**
	Data Rate	**170000**							
	8.56% Above	**184552**							
25	Supply and Fixing of Tai Chi Spinners . Metal: All tubular steel of 2.Smm thicknp<.s are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are sc;illoped as necessa ry and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the w eldin points prior to finishing. All metal parts are powder coated using AKZO Nobel G reat Wall powder to the thickness of 80- 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to JS07227 to speeu up corrosion for 3000 hrs. Colour RAL 5019 Blue and RAL 1014 Beige Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance -free ball bearings. Scope of delivery: 1completely pre-assembled equipment modules. Maintena nce:Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUY, CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. Thecertificates must be attached with the tender document . All products must clearly -display the GS mark as has been issued in the EN15630 safety certificates. Size_ L x W x H): 1120 x 1150 x 1620 mm. Weight: 39 Kg Safety Area: 3520 x 3550 mm								
		Each	1				1.00		
							1.00	124844.00	**124844.00**
	Data Rate	**115000**							
	8.56% Above	**124844**							

No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
26	Supply and fixing of Twist Stepper. Metal: All tubular steel of 2.Smrn thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are sca lloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-GreatWall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to IS07227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings.Scope of delivery: 1completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark.The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV ,CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates . Size_ L x W x H): 1395 x 650 x1750 mm. Weight: 53.8 Kg Safety Area.: 3795 x 3050 mm								
		Each	1				1.00		
							1.00	195408.00	**195408.00**
	Data Rate	**180000**							
	8.56% Above	**195408**							
27	Supply and fixing of HD Health Walker. Metal: All tubular steel of 2.Smm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joint s arescalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a S% NaCl solution in accordance to IS07227 to speed up corrosion for 3000 hrs. Colour RAL 5019 Blue and RAL 1014 Beige Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bea rings.11 Scope of delivery: 1completely pre-assembled equipment modules. Maintenance: Maintain according to EQ_and the maintenance guide.Safety: All productsmust be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS oniy. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. The certificates must be attached with the tender document . All products must clearly display the GS mark as has been issued in the EN16630 safety certificates .Sizelx W xH): 1065 x 61S x 1364 mm.Weight: 51Kg. Safety Area: 4090 • 3555mm.								
		Each	1				1.00		
							1.00	151984.00	**151984.00**
	Data Rate	**140000**							
	8.56% Above	**151984**							

	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
28	Supply and fixing of HD Squat Pushing. Metal:All tub.ular steel of 2.Smm1hicknos are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are sca lloped as necessary: and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing . All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our sa lt spray machine that uses a 5% NaCl solution in accordance to IS07227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles 13 Bearings: Maintenance-free ball bearings.Scope of delivery: 1completely pre-assembled equipment modules.Maintenance: Maintain according to EN 16630 andthe maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS only .The GS Mark-EN16630 Certificates must be in the name of tendering party and not any 3rd party.All products must clearly display the GS ma rk as has been issued in the EN16630 safety certificates.Sizelx W x H): 2270 x 635 x 1640 mm. Weight: 60.2Kg.Safety Area: 5300 *								
		Each	1				1.00		
							1.00	233404.00	**233404.00**
	Data Rate	**215000**							
	8.56% Above	**233404**							
29	Supply and fixing of HD Waist Twister. Metal : All tubular steel of 2.Smm thic k11ess are ga:vanized and zinc dipped. Joints are Robotic welded. All welded joints are scJlloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns.Al l metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to IS07227 to speed up rrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. arings : Maintenance-free ball bearings.Scope of delivery: 1completely pre-assembled equipment modules. Maintenance : Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA,TUV, CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates.								
		Each	1				1.00		
							1.00	141128.00	**141128.00**
	Data Rate	**130000**							
	8.56% Above	**141128**							

No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
30	Providing ,fabricating and fixing Special Multiplay Systems consists of FRP moulded with Aluminium chequered platforms of size 5x5 ft with 4 support piller made out of 75 mm dia G.I "B"pipes fixed in cement concrete 1:2:4.The patforms are to be covered with pyramid shaped FRP roof. The platform is to be with tubular slide & Mini Aquva tunnel Slide made up of high quality FRP the slide is to fixed at a height of 11ft and runs for a length of not less than twenty ft and the slide should be supported at regular intervals of 6ft using M.S pipes support and the platform ladder with 25mm dia MS pipes with suitable hand rails and steps made out of G I sheet with tred 4" with powder coated finish,fine quality FRP with suitable design and as per drawing Moulded FRP slides are non-corrossive ,fade free,tough grade,durable hard and should prevent uv light.The work should be executed as per the standard specifications and directions of the engineer in charge with all lead and lift,loading and unloading and any incidental charge required for								
		Each							
							0.00	645932.00	**0.00**
	Data Rate	**595000**							
	8.56% Above	**645932**				**Item Not Executed**			
31	Providing,fabricating and fixing of spiral climber of height not less than 10ft made out of 25mm dia MS pipe with Aluminium chequered plate platform of size 3x3 ft with 4 legs made out of 75mm dia G.I pipe fixed cement concrete 1:2:4. The platforms are to be covered with pyramid shaped FRP roof .The platform is to be fitted with single lane slide made up of high quality FRP the slide is fixed at a height of 9 ft and runs for a length of not less than 20ft the slide should be supported at regular interval of 4 ft using M.S pipes support powder coated,fine quality FRP with suitable design and as per drawing platforms should be placed at approximately 9 ft from ground level. Moulded FRP slides are non-corrossive,fade free,tough grade,durable hard and should prevent UV light. The work should be executed as per the standard specification and directions of the engineer in charge of the all lead and lift, loading and un loading and any incidental charges required for the successful completion of the work (ALL FRP items are gel water finish or								
		Each							
							0.00	195408.00	**0.00**
	Data Rate	**180000**							
	8.56% Above	**195408**				**Item Not Executed**			
32	Providing fabricating and fixing Multiplay Special slider systems consisting of the plat form with 25mm dia MS pipe and Aluminium chequered plates of size 3x3 ft fitted at 7 ft height from ground level with 4 legs made out of 65mm dia G.I pipes fixed cement concrete 1:2:4. The plat forms is to be fitted with FRP wave slide spiral slide and standard slide with vertical ladder on one side each with GI sheet steps of treads 4" 25mm dia MS pipes with suitable Hand rails fixed at a height of 5 ft and runs for a length of not less than 12 ft the platforms are to be coverd with ryramid Shape FRP roof this slide should be supported at regular intervals of 4 ft using MS pipes support powder coated fine quality FRP with suitable design and as per drawing Moulded FRP slides are non-Corrossive fade free ,tough grade ,durable hard and should prevent uv light.The work should be executed as per the standard specifications and directions of the engineer in charge with all lead and lift,loading and unloading and any incidental charges required for the successful competion of the work (ALL FRP items are gel water finish or								
		Each							
							0.00	564512.00	**0.00**
	Data Rate	**520000**							
	8.56% Above	**564512**							

No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
						Item Not Executed			
33	Providing and fixing childern play bridge with MS perforated tunnel and wave bridge and Arch bridge and hanging bridge made out of MS pipe and chequred plates uns for a height 11 ft to 5 ft the work should be executed as per the standard specification and direction of the engineer in charge of the with all lead and lift ,loading and unloading and any incidenteial charges required for the successful competion of work (all swings chains are rubber coated &all 'S' hooks are stainless steel)								
		Each							
							0.00	130272.00	**0.00**
	Data Rate	**120000**							
	8.56% Above	**130272**				**Item Not Executed**			
34	10HP /7.5KW Submersible Three Phase Pumps ATLANTA, SUGUNA, CRI, KIRLOSKAR and other equivalent Pumps								
	16 stage	Each	1				1.00		
							1.00	51951.39	**51951.39**
	Material Rate	**47855**							
	8.56% Above	**51951.39**							
35	KSRRB M2700-4. Providing, fitting and fixing mild steel railing complete as per drawing and Technical Specification complete as per specifications MORTH Specification No. 2703.2, 1900(Page No 247 Item No 32.4 of PWD SR 2018-19)								
		RMT	1	120.00			120.00		
							120.00	3035.64	**364276.99**
	Basic rate	**2638**							
	Area Weightage 6%	**158.28**							
	Final Rate	**2796.28**							
	8.56% Above	**3035.64**							
36	Providing and fixing Cement Concrete Benches with Base, Back rest and Pedestals of size, Shape and Design including Transportation and with lead and lift, loading and unloading, Earthwork excavation and fixing in 1:4:8 (wherever necessary) and curing etc., complete as per standard Specification and direction of engineer in charge.								
		Nos	30				30.00		
							30.00	11409.66	**342289.68**
	Data Rate	**10510**							
	8.56% Above	**11409.66**							
37	KSRB 2-2.2 : Earth work excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches, 1.5m and above in width, **in hard soil**, exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with all lead upto 50m after breaking of clods complete as per specifications.(P.No.6, I.No.2.4)								
	Street Light		30	0.45	0.45	0.80	4.86		
	Coping for SSM		2	15.00	1.00	2.00	60.00		
	CLF Poles		24	0.40	0.30	0.50	1.44		
							66.30	606.35	**40201.07**
	Basic Rate	**449.00**							
	Area Weightage @ 6%	**26.94**							
	Total	**475.94**							

	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	Average Weight of Earth (1.28 Tonne/Km, Basic rate Rs.2.00 Tonne Km.) For 10 Kms = (2.0x1.28x10)/-	**25.60**							
	KSRRB M100-1 Add loading & unloading (P.No.133,I.No.17.1)	**57.00**							
	Total rate per Cum	**82.60**							
		558.54							
	8.56% Above	**606.35**							
38	KSRB 4-1.3 : Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P.No.13 I.No.4.2)								
	Street Light	Cum	30	0.45	0.45	0.10	0.61		
	Coping for SSM		2	15.00	0.60	0.10	1.80		
	CLF Poles		24	0.40	0.30	0.15	0.43		
							2.84	5871.06	**16671.00**
	Basic Rate	**5102.00**							
	Area Weightage @ 6%	**306.12**							
	Total	**5408.12**							
	8.56% Above	**5871.06**							
39	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design Mix M20 with OPC @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to IS 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 (P.No.14, I.No.4.11 of PW, P&IWTD S.R 2018-19)								
	Street Light		30	0.45	0.45	0.55	3.34		
							3.34	6512.02	**21758.27**
	Basic Rate	**5659.00**							
	Area Weightage @ 6%	**339.54**							
	Total	**5998.54**							
	8.56% Above	**6512.02**							

No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
40	Fabricating, supplying and erection of ...Mtrs long hot dip Galvanized Conical pole with BSEN 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/sec for .....Mtrs pole in single section and single joint welded as per IS 9595/IS 10178AWS having dimensions bottom .....mm, top....mm with 3mm thick, suitable base plate and 4Nos of ..... long J bolts along with template and the pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153 etc.,(excluding foundation) as per drawing appended. 7 meters - Top 75mm and bottom 145 mm dia								
	35/5.16.5								
		Each	30				30	15241.82	**457254.60**
41	Supplying of 1.1 KV class UG cable in having aluminium conductor PVC insulated, sheathed, galvanised, steel wire/steel tap armoured cable with PVC outer sheathing 1.1 KV class (P.No.55, I.No.7.4)								
	I.Class 'A' PVC Cable								
	7.4.2) 4 core 10 sqmm	Per Mtr	1390				1390.00	128.97	**179268.30**
42	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) **P No. 61 / I. No. 7.9.3 KPWD Electrical SR 2014-15**								
		Per Mtr	1390				1390.00	92.28	**128269.20**
43	Labour charges for laying of UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct. **P No. 61 / I No. 7.8.1 6Sqmm to 16 Sqmm) KPWD Electrical SR 2014-15**								
		Per Mtr	1390				1390.00	11.72	**16290.80**
44	Supplying and fixing of heavy duty cable glands suitable or UG cable o 1.1KV class (metal only)(P.No.62, I.No.7.14)								
	7.14.2) 25 mm dia	Each	30				30	93.36	**2,800.80**
45	Supplying tinnd copper lugs and crimping and wiring to terminal point for wire of the following sizes (P.No.64, I.No.7.21)								
	7.21.5) 10 sqmm	Each	30				30	8.30	**249.00**
46	Supplying, and fixing of Hot dip Galvanized M.S.Bracket suitable for out door luminaries and mounted on Octagonal pole using necessary bolts, nuts etc., complete.Single Arm Bracket with 1500mm Standard 40/50MM dia(P.No.36, I.No.5.18.2)								
	Single Arm Bracket with 1500mm Standard 40/50MM dia	Each	30				30	2605.44	**78163.20**

No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
47	LED Street light. Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs. 50000 hr. @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4 KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application.)Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. 2)110								
		Each	30				30	37170.94	**1115128.20**
48	Electronic timer								
	Supply, installtion, testing and commissioning of STREET LIGHT PANEL made up of 16SWG CRCA sheet for body and 14 SWG CRCA sheet for door, outdoor type, floor mounting, powder coated,Degree of projection IP56, with necessary hard ware, interconnection wiring & accessories complete comprising of the following Incomming : 63A 4P 10KA MCB + 2 nos. 32A 3P AC1 contactor + 2 nos. 24hrs Timer Outgoings :18								
		Each	6				6	4885.20	**29311.20**
	EIRL								
E-1	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.								
		Cum	2	15.00	0.60	1.80	32.40		
							32.40	5288.78	**171356.56**
	Basic rate	**4596**							
	Area Weightage 6%	**275.76**							
	Final Rate	**4871.76**							
	8.56% Above	**5288.78**							
E-2	Supplying and fixing M.S. Rectangular poles made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1:2:4) WITH 2 NOS 16mm dia M.S. hold fast rods each of length 25 cms. Including cost of all materials cutting, bending scaffolding wherever necessary, nicely finishing the welded joints with all lead lifts and as per the directions of								
		mtr	24	2.40			57.60		
							57.60	988.48	**56936.58**
	Basic rate	**859**							
	Area Weightage 6%	**51.54**							
	Final Rate	**910.54**							
	8.56% Above	**988.48**							
E-3	Providing and fixing M.S. Block pipe of 38mm dia, of heavy guage of 14 including removing the bends, cutting the pipe, and fixing pipe in between the existing two verticle poles (M.S. rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting, and scaffolding wherever necessary								
		mtr	4	42.00			168.00		
							168.00	469.50	**78876.05**

	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	Basic rate	408							
	Area Weightage 6%	24.48							
	Final Rate	432.48							
	8.56% Above	469.50							
E-4	Providing chain link fencing 50mm size of 8 guage properly stretched between existing rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work								
		Sqm	1	42.00		2.15	90.30		
							90.30	822.78	**74296.69**
	Basic rate	715							
	Area Weightage 6%	42.9							
	Final Rate	757.9							
	8.56% Above	822.78							
							Total Construction Cost		**9522441.64**
							12% GST		**1142693.00**
							Cost towards DPR & PMC		**173000.00**
							Sub Total		**10838134.64**
							Miscellaneous and rounding off		**1865.36**
							Grand Total		**10840000.00**

Certificate.

1 The workspot was inspected and work is found to be necessary.
2 The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3 The rates adopted based on the PWD SR, Bangalore circle for year 2018-19.
4 The provisions made in the estimate are necessary and essential.

Assistant Engineer,
Yelahanka Project Division

Asst. Exec. Engineer,
Yelahanka Project Division

Executive Engineer,
Yelahanka Project Division

TESS CONSULTANTS